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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/147,490 05/13/99 MENDELSON

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EXAMINER

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TURNER, S

ART UNIT	PAPER NUMBER
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1647

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DATE MAILED:

03/02/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

## Office Action Summary

Application No. <b>09/147,490</b>	Applicant(s) <b>Mendelsohn et al</b>
Examiner <b>Sharon L. Turner, Ph.D.</b>	Group Art Unit <b>1647</b>

Responsive to communication(s) filed on 12-7-00

This action is **FINAL**.

Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle* 35 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

### Disposition of Claim

Claim(s) 1-17 is/are pending in the application

Of the above, claim(s) 2, 3, 6-9, and 11-17 is/are withdrawn from consideration

Claim(s) \_\_\_\_\_ is/are allowed.

Claim(s) 1, 4, 5, and 10 is/are rejected.

Claim(s) \_\_\_\_\_ is/are objected to.

Claims 1-17 are subject to restriction or election requirement.

### Application Papers

See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

The proposed drawing correction, filed on \_\_\_\_\_ is  approved  disapproved.

The specification is objected to by the Examiner.

The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. § 119

Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

All  Some\*  None of the CERTIFIED copies of the priority documents have been

received.

received in Application No. (Series Code/Serial Number) \_\_\_\_\_.

received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

### Attachment(s)

Notice of References Cited, PTO-892

Information Disclosure Statement(s), PTO-1449, Paper No(s). 4

Interview Summary, PTO-413

Notice of Draftsperson's Patent Drawing Review, PTO-948

Notice of Informal Patent Application, PTO-152

-- SEE OFFICE ACTION ON THE FOLLOWING PAGES --

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## **DETAILED ACTION**

### ***Priority***

1. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Australia on 7-9-1996. It is noted, however, that applicant has not filed a certified copy of the PO0893 application as required by 35 U.S.C. 119(b). Prior art is applied accordingly.

### ***Election/Restriction***

2. Applicant's election with traverse of Group I, claims 1, 4, 5 and 10 in Paper No. 7 is acknowledged. The traversal is on the ground(s) that unity exists between Group I and III. This is not found persuasive because the special technical feature of the neuroactive peptide comprising SEQ ID NO:1 is anticipated by for example those X references of the IPER as submitted in the IDS and thus does not define a contribution over the prior art and further as under 37 CFR 1.475 the allowed categories are not inclusive of multiple methods of use of the special technical feature.

The requirement is still deemed proper and is therefore made FINAL.

3. Claims 2-3, 6-9 and 11-17 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 7.

### ***Specification***

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4. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. The examiner suggests, "LVV-Haemorphin-7 Neuroactive Peptide and Methods of Use.

***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1, 4, 5 and 10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claims recite "an effective amount of a neuroactive peptide having at least one of the biological activities of angiotensin IV as defined herein," however the claims fail to define any biological activities of angiotensin IV and thus the recitation is indefinite as it lacks proper antecedent basis, no effect or effective amounts are described and the skilled artisan cannot discern those effects which are included or excluded from the claim.

***Claim Rejections - 35 USC § 102 or 103***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

8. Claims 1, 4, 5 and 10 are rejected under 35 U.S.C. 102(a) and 102(e) as being anticipated by Anderson et al., US 5599907, issued February 4, 1997 with a 102(e) date of May 9, 1994.

Anderson et al., teach production and use of multimeric hemoglobins in a method of supplementing oxygen carrying capacity of blood by administration to a human patient a composition of hemoglobin comprising peptide of SEQ ID Nos 19 and 20, residues 32-41 with 100% identity to the instantly claimed peptide comprising SEQ ID NO:1, see in particular abstract, claims 3, 5, 7, 12, 14, 33, 35, 38, 42-44, 54, 63 and 72-74. As the method merely comprises administration of a peptide comprising SEQ ID NO:1 the properties of modulating neuronal activity are encompassed by Anderson. The method of claims 1, 4, 5 and 10 fail to specifically point to a required effect of administration of SEQ ID NO:1 and thus supplementing oxygen carrying capacity of blood constitutes at least one of the biological activities of angiotensin IV and inherently comprises modification of learning, facilitating memory retrieval and vasoactive effects including dilation of cerebral arteries and increasing blood flow. Thus, the reference teachings anticipate the claimed invention.

9. Claims 1, 4, 5 and 10 are rejected under 35 U.S.C. 102(e) as being anticipated by Wolpe et al., US 5861483, issued January 19, 1999 and filed April 3, 1996.

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Wolpe et al., teach production of a peptide inhibitor of stem cell proliferation and uses thereof in methods of inhibiting stem cell proliferation, for bone marrow transplantation, treatment of hypoproliferative disorders and gene transfer to human patients comprising administration of a composition comprising peptide of SEQ ID Nos 4 and 26, residues 1-10 with 100% identity to the instantly claimed peptide comprising SEQ ID NO:1, see in particular columns 4-5, column 8, lines 47-63 and example 17. As the method merely comprises administration of a peptide comprising SEQ ID NO:1 the properties of modulating neuronal activity are encompassed by Anderson. The method of claims 1, 4, 5 and 10 fail to specifically point to a required effect of administration of SEQ ID NO:1 and thus the properties of inhibiting stem cell proliferation constitutes at least one of the biological activities of angiotensin IV and inherently comprises modification of learning, facilitating memory retrieval and vasoactive effects including dilation of cerebral arteries and increasing blood flow. Thus, the reference teachings anticipate the claimed invention.

10. Claims 1, 4, 5 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Bridge et al., US 5063206, issued November 5, 1991.

Bridge et al., teach a neuroactive peptide composition for treatment of human neuropsychiatric disorders including memory deficits which peptide comprises an analogue of the peptide comprising SEQ ID NO:1 and shares a fragment of SEQ ID NO:1 while retaining the biological activity of improving memory deficit, see in particular columns 1-3 and claim 1. Thus, the reference teachings anticipate the claimed invention.

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***Status of Claims***

11. No claims are allowed.
12. Any inquiry of a general nature or relating to the status of this general application should be directed to the Group receptionist whose telephone number is (703) 308-0196.

Papers relating to this application may be submitted to Technology Center 1600, Group 1640 by facsimile transmission. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). Should applicant wish to FAX a response, the current FAX number for Group 1600 is (703) 308-4242.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sharon L. Turner, Ph.D. whose telephone number is (703) 308-0056. The examiner can normally be reached on Monday-Thursday from 8:00 AM to 6:30 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Kunz, can be reached at (703) 308-4623.

Sharon L. Turner, Ph.D.

March 1, 2001

**CHRISTINE J. SAUD  
PRIMARY EXAMINER**

*Christine J. Saoud*